

### An E-Update

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# Bridge Design Research Could Save Millions

A recently completed MoDOT study discovered the state could save millions of dollars each year by sizing its bridges for actual traffic volume and weights. National research back in the 1990s suggested a more effective design method for structures would scale the designs based on load and resistance factors. Unfortunately the Load and Resistance Factor Design (LRFD) research did not take into account regional differences for traffic volumes and types. Research conducted by the Missouri Transportation Institute showed that most bridges in the state exceed national reliability targets and those on lower volume routes could use more economical designs. Bridge your knowledge gap on the subject with the full report. LRFD Design Calibration Report

# **Rebar Coatings Study Will Strengthen Structures**

About \$10 billion is spent annually to address corrosion problems on our nation's bridges. Epoxy coatings have been widely used for corrosion protection of steel rebar in reinforced concrete structures. However, epoxy coated rebar doesn't bond as well to concrete requiring longer lengths of rebar, which causes problems at structure joints. Now thanks to a recently completed research project, specific application rates for enamel coatings have been identified that will provide the best combinations of corrosion protection and bonding strength. All the details are anchored in the full report. Rebar Coatings Report

# **Bridge Deck Panel Failures Investigated**

Prefabricated, pre-stressed bridge deck panels help MoDOT build and rehabilitate bridges faster with fewer traffic interruptions. However, some panels installed over the past few years have developed cracks and loose pieces of concrete. A recently completed study has suggested ways to repair and maintain existing panels on structures, as well as construction options for future structures.

Bridge Deck Panel Report

# **Annual Report Highlights Accomplishments**

This past year, Organizational Results has been a flurry of activity with a number of noteworthy accomplishments. You can read about it for yourself in our Fiscal Year 2010 report. Organizational Results Fiscal Year 2010 Report

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